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C-A OPERATIONS PROCEDURES MANUAL

4.101 Controlled Access Into PASS Zone 4z1 by the RF Group

Text Pages 2 through 7

Hand Processed Changes

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Approved: *Signature on File* _____
Collider-Accelerator Department Chairman Date

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4.101 Controlled Access Into PASS Zone 4z1 by the RF Group

1. Purpose

- 1.1 The purpose of this procedure is to give instructions to RF Group Members (RFGM) to access RHIC (PASS) zone 4z1 under Controlled Access (CA) conditions. It is written in order to expedite Rf testing by minimizing the time spent sweeping the 4z1 enclosure of personnel.
- 1.2 This procedure authorizes RFGM to perform gate watch duties only at RHIC gate 4GE2.
- 1.3 This procedure may only be used during RHIC RF stand-alone operation – that is – when PASS control has been switched from Building 911A to Building 1004A.
- 1.4 This procedure authorizes the “work group leader” to sign the gate log sheet in place of the Operations Coordinator.

2. Responsibilities

- 2.1 RF Group members are responsible for the execution of this procedure.

3. Prerequisites

- 3.1 The target group for this procedure is the RF Group.
- 3.2 The training requirement for this procedure is a walk-down of the procedure by the author.
- 3.3 Additional persons who may act as trainers of this procedure include the Assistant RF Group Leader and the Technical Supervisor of the RF Group.
- 3.4 Proof of training will be a “C-A Training Roster” sheet that contains the names of the trained individuals. The roster will be signed by any of the persons cited in paragraphs 3.2 or 3.3.
- 3.5 The minimum number of persons that must be trained before this procedure may be used is three: the RF Group Leader, or designee, the Technical Supervisor, and an additional RF Group member.
- 3.6 Six PASS keys (three EB010 for Controlled Access, two EB011 for Sweep/Reset, and one EB016 “Transfer” key) must be removed from the MCR_2 console in Building 911A and placed in the appropriate keyswitches in Rack 4ACT7 in Building 1004A.
- 3.7 TWO persons to perform the access: one gate watch, and one to give permission (simultaneous release) to enter.

- 3.8 RFGM shall have valid C-A Access Training in order to obtain a CA key. A “RHIC PASS Restricted Access Card” is valid proof of Access Training.
- 3.9 Permission has been given for stand-alone RHIC RF operation by the Head of Operations.

4. Precautions

- 4.1 Remote Controlled Access is not authorized by this procedure – that is -- RFGM must post a gate watch at 4GE2 and not use the video available in the RF Control Room in Building 1004A during a Controlled Access.
- 4.2 PASS provides THREE CA keys for 4z1. Only THREE persons may enter during Controlled Access. IF more persons must simultaneously enter, THEN the enclosure (4z1) must be set to Restricted Access (RA) and re-swept at the conclusion of the work.
- 4.3 Every space shall be filled out on the Gate Log Sheet form. N/A – Not Applicable may be entered where appropriate. Unused “sign-in” lines shall be “X”ed out.
- 4.4 Only RF Group personnel may be admitted into 4z1 during Controlled Access with a RF Group Gate Watchstander.
 - 4.4.1 IF a member of another group wishes to enter 4z1 with RF Group personnel, THEN 4z1 shall be set to Restricted Access (RA) in order to permit others to enter.
 - 4.4.2 The justification for the restriction of paragraph 4.4 is that members of other groups may not be familiar with the hazards present in 4z1 during an interruption to RF testing.

Note:

An explicit exception to the rule of Paragraph 4.4 is to allow the MCR Group Leader, reviewers of this procedure, or members of the ESHQ Division access to 4Z1 for the sole purpose of verifying the correct implementation of this gate watch procedure

- 4.5 IF an entrant leaves the enclosure, THEN they shall go through the “sign in/out process” as if they were a new entrant.

5. Procedure

- 5.1 Entering 4z1 under Controlled Access

- 5.1.1 Turn off RF Critical Devices
 - 5.1.1.1 RF CDEV1 and RF CDEV2 lamps will light on PASS panel at rack 4ACT7.
 - 5.1.1.2 IF both lamps do not light, access is not permitted, contact an Access Controls Group Member for assistance.
- 5.1.2 Press “CA Request” push button on PASS panel. Observe CA lamp lights.
- 5.1.3 Gate watch shall fill out lines one through four of [C-A-OPM-ATT. 4.1.a "C-A Gate Security Log Sheet form"](#). The form can be printed from the web.
 - 5.1.3.1 The RCT survey is not required. The gate watch shall enter N/A on line 4.
- 5.1.4 Gate watch shall “sign in” on first line (entrants area) of Gate Log Sheet.
- 5.1.5 Gate watch shall remove as many CA keys (3 maximum) from the PASS panel in rack 4ACT7 as there are entrants to 4z1.
 - 5.1.5.1 Gate watch shall also remove a EB011 Sweep/Reset (S/R) key for gate reset.
- 5.1.6 EACH 4z1 entrant signs in by:
 - 5.1.6.1 showing their RHIC PASS Restricted Access Card to gate watch to demonstrate valid C-A Access training,
 - 5.1.6.2 obtaining a CA key from gate watch,
 - 5.1.6.3 printing their name in column 2 of the gate log sheet,
 - 5.1.6.4 writing the CA key identification number (1, 3, or 4) in column 3 (NOT EB010) of the gate log sheet,
 - 5.1.6.5 writing “4z1” in destination column 4 of the gate log sheet.
- 5.1.7 Gate watch and entrants proceed to gate 4GE2.
- 5.1.8 **TO ENTER** Each entrant shall:
 - 5.1.8.1 Write their signature in column 5 of the gate log sheet.
 - 5.1.8.2 Phone the RF Control Room for a simultaneous release.
 - 5.1.8.2.1 RF group member in RF Control Room gives simultaneous release by pressing “Release 4GE2” button on PASS panel in rack 4ACT7.

Note:

Do not remove finger from "Release 4GE2" button until gate is closed, as seen in the video monitor on top of the rack. If the button is released prematurely, then the sweep will be lost.

5.1.8.2.2 Entrant inserts and turns CA key in "EB10" keyswitch in PASS 4GE2 box to the right of the gate in order to enter.

5.1.8.3 Gate watch shall initial them in by writing their (the gate watch's) initials in column 6 of the gate log sheet each time an entrant enters 4z1.

5.1.9 **TO EXIT** Each entrant shall:

5.1.9.1 Phone the RF Control Room for a simultaneous release

5.1.9.1.1 RF group member in the RF Control Room shall give a simultaneous release by pressing the "Release 4GE2" button on the PASS panel in rack 4ACT7.

Note:

Do not remove finger from "Release 4GE2" button until gate is closed, as seen in the video monitor on top of the rack. If the button is released prematurely, then the sweep will be lost.

5.1.9.1.2 Entrant shall exit the enclosure when they hear the gate buzzer corresponding to the simultaneous release.

5.1.9.2 Sign out by writing their signature in column 7 of the gate log sheet.

5.1.9.2.1 IF an error occurs during the sign out process, THEN the gate watch shall correct the form by crossing out the corrupted line and by rewriting the information on a new line.

5.1.9.3 return CA key to gate watch

5.1.9.4 gate watch initials entrant out by writing their (gate watch's) initials in column 8 of the gate log sheet.

5.2 Relieving the gate watch (optional)

5.2.1 The gate watchstander may be relieved by another member of the RF Group who is trained in this procedure.

5.2.2 The gate watch reliever shall

5.2.2.1 sign in on the gate log sheet

5.2.2.2 assume control of outstanding CA keys and the S/R key for the gate.

5.2.2.3 conduct the gate watch according to this procedure

5.3 Restoring PASS permission for RF testing

5.3.1 Gate watch makes certain that all who signed in on the gate log sheet have signed out on the same line.

5.3.2 Gate watch resets gate 4GE2 using the Sweep/Reset (EB011) key in the “EB11” keyswitch on the PASS 4GE2 box to the right of the gate.

5.3.3 Gate watch fills out header line 5 of the gate log sheet – time gate locked and signs their name.

5.3.4 Gate watch returns to RF Control Room with all the CA keys and the S/R key and inserts and captures them in the appropriate keyswitches.

5.3.5 Gate watch gives the gate log sheet to the work group leader.

5.3.6 Work Group leader verifies

5.3.6.1 that all CA and S/R keys are captured in the console

5.3.6.2 that all who signed in on the gate log sheet have signed out on the same line

5.3.6.3 that the gate watch has initialed in both the “initial in” and “initial out” columns of the gate log sheet for each entry and exit.

5.3.7 Work Group Leader signs in the “reviewed by Operations Coordinator’s space” line 6 of the header of the gate log sheet affirming that the log sheet has been reviewed to verify that all entrants have signed out.

5.3.8 Work Group Leader checks “no” on line 7 of the header of the gate log sheet affirming that 4GE2 was not open for 4 or more hours, OR 26 entries were not made while gate 4GE2 was not reset.

5.3.8.1 IF the work group leader cannot check “no” on line 7 of the gate log sheet, THEN he shall order that the enclosure be swept according to [C-A-OPM-ATT. 4.56.ba](#)

5.3.9 Work Group Leader writes signature in the “OC Concurrence space” on line 7 of gate log sheet, affirming that a sweep of the enclosure is not required.

5.3.10 Work Group Leader gives gate log sheet to gate watch for filing in a completed gate log sheet binder

5.3.11 Work Group Leader selects No Access by pressing “NA Request” push button on PASS panel at rack 4ACT7.

5.3.11.1 IF PASS does not indicate NA state (lamp not lit), THEN one or more of the following is true:

- One or more gates are not reset (lights are lit)
- Sweep Lamp is not lit (Sweep no good)
- One or more keys are not captured in PASS panel in rack 4ACT7
- Crash light is lit
- No Good HW (hardware) light is lit on the PASS panel in rack 4ACT7

5.3.11.2 RF group members will need the assistance of an ACG member to correct only the last of the bulleted items in 5.3.11.1.

5.3.12 RF Critical Devices may be turned on

6. **Documentation**

6.1 [CA-OPM-ATT. 4.1.a C-A Gate Security Log Sheet Form](#). These forms MUST be filed in a three-ring binder and be saved. Binders for current and previous year are maintained in MCR. Older binders are stored in the warehouse along with other gate log sheets.

7. **References**

7.1 [CA-OPM-ATT. 4.1.a C-A Gate Security Log Sheet Form](#)

7.2 [CA-OPM-ATT. 4.56.ba RHIC ZONE 4z1 – RF – SWEEP CHECKLIST](#)

8. **Attachments**

None